DESIGN BRIEFING SYSTEM

DBS 6

MC0312

Radiodiagnostic Department

DEPARTMENT OF HEALTH AND SOCIAL SECURITY
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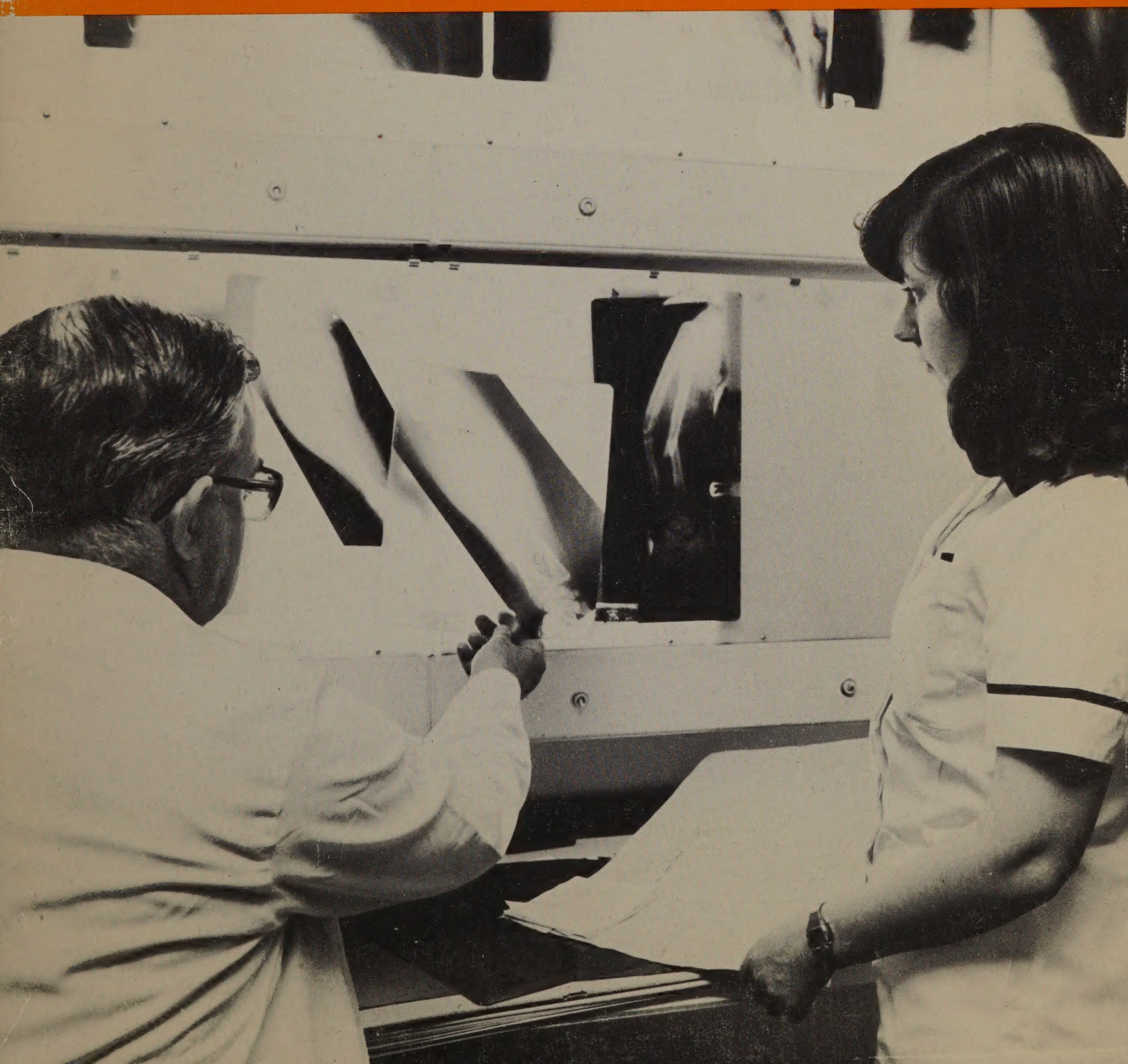

Design Briefing System

RADIODIAGNOSTIC DEPARTMENT

Parts 1 and 2

This Design Briefing System (DBS) document should be used in conjunction with Health Building Note No.6, Radiodiagnostic Department.It is essentially a working document for recording decisions at project team meetings when formulating user requirements for a design brief.All members of the project team will require their own copy.

Further copies of this DBS document are available from HMSO bookshops and agents (see Yellow Pages) or through any good bookshop. In case of difficulty write to:-

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Design Briefing System

RADIODIAGNOSTIC DEPARTMENT

Part 1

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Design Briefing System

INTRODUCTION

1. The preparation of design briefs for health buildings can be simplified by using a briefing aid produced by the Department of Health. Called Design Briefing System, or DBS for short. It helps project teams to identify user requirements in a logical well-considered manner.

2. What DBS provides
The system adopts a disciplined check list approach, identifying the planning decisions which need to be made. It is adaptable to the needs of individual project teams. A range of appropriate planning options is provided on the right hand pages of each DBS document, together with extracts of associated guidance from Health Building Notes (HBNs) on left hand pages. There is a simple referencing system which allows cross checking for compatibility of decisions made, and tracing throughout each document the consequences of changing decisions. They are arranged so that project team members can make their own record of decisions in the document itself mostly by ticking options, or entering additional text in the appropriate place. The brief is then typed directly from the completed Master document, supplemented where necessary with information from project team minutes.

3. Using DBS encourages project teams to consider the compatibility of decisions in a systematic and logical manner, thereby preparing a brief containing adequate detail of the user requirements. This should help to improve those areas in which some past designs have been deficient. For example, the provision of inadequate access or space; inadequate storage facilities.

4. DBS is primarily concerned with the detailed briefing stage of a project - preparation of the client/users contribution to a comprehensive design brief. In addition to providing information to the designer,the brief is useful at the commissioning stage , and for evaluation when the building has been in use for a period.

5. The use of DBS enables client/user requirements to be stated clearly and concisely by the project team, not only in respect of accommodation, but also how that accommodation is to be used. Furthermore,during refinement of the brief,use of DBS enables a check to be made on the implicatations of modifications resulting from previous client/user decisions, i.e. it establishes a systematic data chain which can be referred to if at some subsequent stage it is necessary to trace back the reason for decisions. It must be borne in mind, however, that DBS options are not costed, and while providing the cost planner with earlier and more detailed information regarding the client/user requirements, DBS in itself does not assist in matching these with the money available.

6. **DBS DOCUMENTS ARE INTENDED TO BE USED AS AN AIDE MEMOIRE IN CONJUNCTION WITH THE ASSOCIATED HEALTH BUILDING NOTE AND OTHER GUIDANCE ISSUED BY THE DEPARTMENT, AND SHOULD NOT BE REGARDED AS TAKING THE PLACE OF SUCH GUIDANCE.**

HOW TO USE THIS DOCUMENT

7. Using the document effectively
There are two parts to the document. The first part requires decisions to be taken, lists the options available, and includes extracts of relevant guidance from the Health Building Note. The second part lists activity spaces (or rooms) from which a selection can be made based on decisions recorded in the first part.

8. Flexible use
Above all, the system should be used flexibly. Although the document anticipates the planning decisions which need to be considered, and carefully phrases the choices so that the design brief can be prepared directly from the document, the project team can add other decisions, options, and notes, or change the phrasing of existing ones to suit the project's requirements.

9. Distribution
A copy of this document should be given to each member of the project team well before the first meeting where it is to be used. A master copy should be held by the project team secretary to record agreed decisions from which the brief is prepared.

10. Planning the meetings
Each member of the project team should read their copy of the DBS document, and the associated

Health Building Note, before the first planning meeting. This gives an overall view of the planning decisions which have to be made and helps to place the sequence of the decisions discussed at meeting in the right context.

The document can be used also, especially by the secretary or chairman of the team, to prepare the agenda of meetings and to arrange in advance for the attendance (or at least the views to be obtained) of representatives of specialist users (e.g. dentists, pharmacists, domestic services manager) when a particular service is being discussed

11. Between meetings
Individual project team members can be assigned tasks relating to specific parts of the document to consider between meetings. This feature can be used to obtain relevant information, to stimulate and focus attention on necessary fact-finding studies. It also highlights groups of decisions for members to work on, individually or in consultation with colleagues or other specialists

12. Member's record of meetings
Each member of the project team should record in their own copy of the DBS document the decisions agreed at meeting so that;

a) a clear, immediate record of agreed decisions is taken away from each project meeting, rather than having to wait for meeting minutes (which have not been confirmed and may not always reflect accurately the decisions made);

b) one continuous record of up-to-date decisions is held by each team member rather than having records of decisions taken (and often revised) at various times embedded in a series of minutes (which may, in turn, be inaccurate).

13. This feature is especially important (at or outside the project meetings) when considering decisions which may have been ammended by decisions made previously, and when checking that any interim or draft design briefs accurately reflect the latest agreed decisions. If members are absent from a particular meeting then arrangements must be made for them to update their own DBS document.

14. Meeting minutes
Minutes need only concentrate on the background leading up to the decisions made (and recorded in the DBS document) at project team meetings. If it is decided that parts of the minutes should be included in the client brief as supporting information, a note should be made alongside the relevant parts of the minutes which are to be added to the brief.

15. Cross-referencing
This is explained in detail in paragraph 26. It enables decisions to be cross-checked and is an important feature especially in helping to review the implications of revising decisions made at previous meetings.

16. Design brief content
The primary aim of the brief prepared from this document is to record the client/user requirements for a health building. The brief should be as unequivical as possible to enable the design team to interpret their requirements into a design.

17. In addition, the brief will contain background information for designers and provide the basis for the commissioning and evaluation of the building. The organisational decisions included in DBS documents form an important aspect of this. The project team may decide also to include some extra background information from meeting minutes and this should be carefully noted in the Master DBS document.

18. Any brief (whether interim or complete) should be prepared directly from the Master DBS document (with supporting parts of minutes included as notes). This helps to ensure that the draft is as up-to-date and as complete as possible. It is also easier for all members of the team to check its accuracy. The draft can then be agreed and edited before issue outside the project team.

AN EXAMPLE OF PART OF A BRIEF TYPED FROM ONE PAGE OF A DBS DOCUMENT IS REPRODUCED AS AN APPENDIX.

19. Preparation of Part 2
Part 1 should be complete before selecting the detailed accommodation required (activity spaces) in Part 2. The secretary or chairman of the team can use Part 2 to ensure that a thorough check is carried out of the detailed implications of planning decisions recorded in Part 1. The choice of activity spaces and data sheets in draft form can then be made by a small sub group of the planning team for subsequent ratification by the full team.

20. Use after the brief is prepared
The Master copy of this completed document should be retained (and kept up-to-date with any changes) as part of the project documentation after the design brief has been agreed, so that:

a) any subsequent changes in the brief or design which may be necessary during the project design stage can be fully checked out for their implications using the cross-referencing features of the DBS document;

b) it forms the basis for preparing operational manuals, initialising training programmes, etc during commissioning.

c) a true evaluation can be made between the completed building and the intentions recorded in the design brief;

d) when considering any future building changes, upgrading or project phases, this DBS document (together with any other DBS ducuments for the project) is readily available to help ensure that new planning decisions are compatible with existing accommodation that has already been planned (but not yet built).

COMPLETION OF THE DOCUMENT

It is intended that the DBS document should be used as notebook in which each project team member can record the options selected at project team meetings, in addition to any other relevant background notes or information.

21. Content
The planning decisions in this document are structured as follows:

a) General Philosophy and Considerations, which is a summary of general philosophy of the service provided and general points that require consideration;

b) Scope of Service and Workload , which sets out the scope of service provided and its workload;

c) Locational Relationships with other areas of the hospital;

d) Organisation of Service , which sets out detailed operational policy decisions under several subheadings. Planning decisions in this section have a direct implication on one or more of the following:

(i) Design,i.e. affect the type and quantity of the detailed facilities to be provided;

(ii) Operational policy, i.e.state operational procedures or staffing decisions which can be used as a reference point for commissioning or evaluation.

e) General Design Requirements , which state any over riding requirements which are not specified elsewhere in the design brief.

22. Presentation of information
Except for the introductory section - General Philosophy - all sections of the DBS document contain a set of options/planning decisions (shown on the right hand pages) together with extracts of any relevant planning guidance material (shown on the left hand pages), opposite the appropriate options/decisions.

23. Guidance
The primary objective of the extracts of guidance material on the left hand page is to remind the project team of the appropriate section of the Health Building Note which must be taken into account before specific options on the opposite page are selected.

24. Paragraphs of guidance dealing with cost effectiveness are highlighted in bold type, to alert the project team to the capital and running cost implications of certain decisions

25. Planning decisions
For most planning decisions a set of possible options is shown. Some of these may be predetermined, e.g. because there is no alternative; compatibility with whole hospital policies. The project team select the appropriate option by ticking within the square brackets alongside. Where appropriate their choice can be quantified, or they can enter other decisions, options of further information to be included in the brief.

26. A simple referencing system is incorporated which allows cross-checking for compatibility of decisions made. The reference relates to the page No (top left-hand corner) and the 'REF'column letter. For example, on page 7 of the DBS document 'Radiodiagnostic Department', under reference 'C' - 'Patients may be: (a) examined on arrival, without appointment'. The unique reference for this option if selected is 7C(a), to which can be added the generic code for that DBS document 'RAD', making in all RAD7C(a).

27. The references in the 'EARLIER DECISION' columns (which are already printed in the document) may be used in a number of ways:

-to check when making a decision that previous decsions are compatible;

-to check all the relevant consequences of doing so when proposing to change a decision.

GENERAL PHILOSOPHY

The purpose of a radiodiagnostic department is to provide facilities for the investigation of patients by means of radiological and complementary techniques. These investigations are normally undertaken at the request of the clinician responsible for the patient concerned, modified if necessary by a radiologist. Radiodiagnostic departments seek to provide diagnostic information by carrying out investigations and reporting on the results as quickly as is reasonably practicable. (HBN, para. 1.6)

Most of the work undertaken in a radiodiagnostic department makes use of X-rays, but many departments also carry out ultrasound investigations and other forms of imaging. The building implications of such techniques need to be understood by those involved in designing departments so that facilities can be planned to meet the needs of patients and staff. (HBN, para. 1.12)

HBN, No. 6 gives guidance on the planning and design of radiodiagnostic departments for a District service, where the normal range of radiological and related procedures in routine use at general acute hospitals are to be employed. (HBN, para. 1.4)

2. SCOPE OF SERVICE & WORKLOAD

SOURCES OF WORK

Radiodiagnostic departments in a hospital provide a diagnostic service for other departments in the same hospital, smaller neighbouring hospitals, general practitioners and community health team doctors. (HBN, para. 1.13)

DIAGNOSTIC WORK OUTSIDE THE DEPARTMENT

Investigations may take place outside the main radiodiagnostic department and possibly in associated smaller hospitals. In such cases the radiodiagnostic department may provide staff and will be responsible for the radiological equipment used. (HBN, para. 1.14)

HBN No. 6 does not give guidance on:

a. the planning of rooms for highly specialised complex radiological procedures which are more appropriate to specialised units, e.g. regional cardio-thoracic and neuro-surgical centres;

b. the accommodation requirements for computerised tomography for brain or whole-body scanning (Appendices I and II) - guidance on this subject will be forthcoming;

c. teaching facilities. A separate case will need to be made for the cost of any additional accommodation needed for trainee radiologists or radiography students. (See the Department's DS letter 65/74 about teaching hospital space requirements issued on 22 March 1974 .);

d. radioisotope services. Information on these services is contained in "Radioisotope Services - A Design Guide" DHSS 1973 [to be revised]. This document can be used as appropriate when, in accordance with local decisions, some facilities for radioisotope services are to be included in the radiodiagnostic departments. Information on premises and equipment for the preparation of radio-pharmaceuticals is included in Health Building Note No. 29, "Pharmaceutical Department" (in preparation) and also in the "Guide to Good Pharmaceutical Manufacturing Practice", HMSO.

(HBN, para. 1.5)

Earlier decision | Ref

2. SCOPE OF SERVICE & WORKLOAD

A The department will provide a service for the following categories of patient:
(a) in-patients who are sent for as workflow and demand allow [ ]
(b) in-patients requiring preparation, booked for a specific time [ ]
(c) accident and emergency referrals [ ]
(d) out-patients referred for simple procedures [ ]
(e) out-patients requiring preparation, booked for a specific time [ ]
(f) G.P. and community health patients, by appointment [ ]
(g) G.P. and community health patients attending open sessions [ ]
(h) patients who require prolonged treatment or examination [ ]
(i) patients who need to be anaesthetised [ ]
(j) patients who require preparation within the department [ ]
(k)

B The department will be a base for mobile X-ray services for:
(a) in-patients whose condition precludes them coming to the department [ ]
(b) patients in the operating department who need to be examined during their operation [ ]
(c) emergency services in the Accident & Emergency department [ ]
(d)

C An ultrasound service will be provided:
(a) in the diagnostic X-ray department [ ]
(b) in the obstetric department [ ]
(c) in both diagnostic X-ray and obstetric departments [ ]
(d)

D A radioisotope service will be provided:
(a) in the diagnostic X-ray department [ ]
(b) in the nuclear medicine department [ ]
(c)

E The department will not be equipped for:
(a) cardio-thoracic contrast procedures [ ]
(b) neuro-surgical procedures [ ]
(c) a miniature chest X-ray service [ ]
(d) C.T. scanning [ ]
(e) radioisotope service [ ]
(f) ultrasound service [ ]
(g)

2. SCOPE OF SERVICE & WORKLOAD (contd.)

Earlier decision | Ref

2. SCOPE OF SERVICE & WORKLOAD (contd.)

A The department will serve:

(a) the hospital where it is sited (SPECIFY) _____
(b) patients from other hospitals (SPECIFY) _____
(c)

B The department will be supported by:

(a) other radiodiagnostic facilities within the Health District
(b) (SPECIFY) _____

C The estimated number of patients examined per annum will be:

(a) _____

D Teaching and/or research facilities will be required for (SPECIFY):

(a) _____
(b) _____
(c) _____
(d)

E The estimated number of contrast and specialised examinations undertaken per annum will be:

(a) barium examinations _____
(b) urography examinations _____
(c) biliary examinations _____
(d) tomography examinations _____
(e) mammography examinations _____
(f) ultrasound examinations _____
(g) arterial and vascular examinations _____
(h) dental/orthodontic examinations _____
(i) arthrography examinations _____
(j) radiculography examinations _____
(k) radioisotope examinations _____
(l)

3. SUMMARY OF PROVISION

SIZE OF THE DEPARTMENT

In planning a radiodiagnostic department its size should be expressed in terms of the number of diagnostic rooms, irrespective of their use. To avoid initial over-provision the department should be designed and located to permit phased expansion, care being taken to ensure that each phase is viable within itself and that the department will function as a complete entity regardless of its size. (HBN, para. 2.12)

It should be noted that a large radiodiagnostic department is likely to be more efficient than several smaller ones because staff and equipment can be more effectively employed. Departments should as far as possible be centralised which may allow the number of diagnostic rooms to be reduced.

SATELLITE ROOMS ARE GENERALLY NOT COST EFFECTIVE; ONLY EXCEPTIONALLY SHOULD FIXED EQUIPMENT BE PROVIDED OUTSIDE THE MAIN RADIODIAGNOSTIC DEPARTMENT.

The output of specific diagnostic rooms will vary considerably depending on such factors as the type of equipment installed and scope of examinations undertaken. For individual schemes it is important for project teams to make full use of their professional advisers to obtain statistical and other relevant material. Recognition must be given to particular local needs and related trends, together with geographic and organisational factors which might be expected to change. (HBN, para. 2.14)

A method describing how the number of radiodiagnostic rooms likely to be required can be calculated is given in HBN 6, Appendix V, together with a worked example. (HBN, para. 2.15)

Earlier decision	Ref	3. SUMMARY OF PROVISION
	A	The number of general purpose radiodiagnostic rooms to be provided in the department will be: _____
	B	Facilities will be required in some rooms for the following specialised investigations: (a) G.I. tract fluoroscopy [ ] (b) urography [ ] (c) arterial/vascular investigations [ ] (d) paediatrics [ ] (e) examination under general anaesthesia [ ] (f) dental/orthodontic [ ] (g) complex tomography [ ] (h) ultrasound [ ] (i) radioactive isotopes [ ] (j)
2C,3D 2D,3D		
	C	Radiodiagnostic rooms with differing primary functions will contain supplementary equipment for the following: (a) erect examinations [ ] (b) skull examination [ ] (c) dental examination [ ] (d) mammography examination [ ] (e)
3D		
3D	D	Diagnostic ultrasound facilities will be provided: (a) within the department [ ] (b) in the Maternity Department [ ] (c) within the department and in the Maternity Department [ ] (d)

3. SUMMARY OF PROVISION (contd.)

Earlier decision	Ref	3. SUMMARY OF PROVISION (contd.)
	A	It is anticipated that the normal working hours of the department, Monday-Friday, will be: (a) _____ (b)
	B	It is anticipated that the Saturday opening hours will be: (a) _____ (b)
	C	The department will be closed: (a) Saturday and Sunday [ ] (b)
2A,B	D	Emergency cover outside working hours will be provided by: (a) an on-call from home service [ ] (b) a standby service [ ] (c) a shift system [ ] (d) agency staff [ ] (e)

4. LOCATIONAL RELATIONSHIPS

LOCATION

Radiodiagnostic services must be available both in and out of normal working hours. The radiodiagnostic department should be sited immediately adjacent to the Accident and Emergency Department which would normally be located at ground floor level. The department should be easily accessible from the out-patient accommodation (including the fracture clinic) and the in-patient accommodation and main entrance.

The following aspects of siting merit particular attention:

a) the relationship between the radiodiagnostic department and the Accident and Emergency department is important since emergency medical care for severely injured patients may continue in the radiodiagnostic rooms. Thus the clinical areas of the two departments should be contiguous.
b) The relationship between the radiodiagnostic department and the fracture clinic is significant as relatively large numbers of patients, many of whom will have difficulty in walking, are referred from one to the other.
c) The proximity of the ante-natal clinic to the radiodiagnostic department will depend upon where obstetric ultrasound facilities are provided.
d) It is also of particular importance that the relative locations of the radiodiagnostic department and wards be considered with regard to movement of in-patients outside normal working hours.

(HBN, para. 2.16)

INTERNAL DEPARTMENTAL RELATIONSHIPS

The radiodiagnostic department should be designed so that it is possible to undertake diagnostic examinations outside normal working hours without activating the whole department. Access to these facilities will be required by both the Accident and Emergency Department and the wards at all times. Processing and clerical facilities, together with sub-waiting space, will also need to be available. (HBN, para. 2.17)

Earlier decision	Ref	4. LOCATIONAL RELATIONSHIPS
2A,B	A	Priority of access is required from the: (a) accident and emergency department [ ] (b) out-patients department [ ] (c) main entrance of the hospital [ ] (d) in-patient wards [ ] (e)
2A,B	B	Easy access is required to and from: (a) the operating theatres [ ] (b) the fracture clinic [ ] (c)
	C	The department should be sited: (a) on the ground floor [ ] (b) adjacent to the accident and emergency department [ ] (c) close to the out-patient department [ ] (d) close to the ante-natal clinic [ ] (e)
	D	The order of priority for planning the Radiodiagnostic Department near the other areas of the hospital is (INDICATE PRIORITIES IN NUMERICAL ORDER): (a) accident and emergency department _____ (b) out-patient department _____ (c) main hospital entrance _____ (d) in-patients wards _____ (e) operating theatres _____ (f) intensive therapy unit _____ (g) coronary care unit _____ (h) ante-natal clinic _____ (i) (j)

5.1 ENTRANCE, RECEPTION & DOCUMENTATION

PATIENT FLOW

A common sequence of patient movement through a radiodiagnostic department is:

(a) arrival at reception (escorts would report some arrivals) for documentation procedures;
(b) direction of patient to the main waiting area or to a diagnostic room sub-waiting area by clerical or auxiliary staff;
(c) preparation of patient for examination if necessary, e.g. undressing in a changing cubicle;
(d) diagnostic examination;
(e) waiting in the diagnostic room or returning to the sub-waiting area or a cubicle to wait until the films have been processed and checked;
(f) patient leaves the department (after dressing, if necessary).

(HBN, para. 4.2)

RECEPTION/APPOINTMENTS AREA

The reception/appointments area is the focal point of the department, and should be designed to serve the whole department. Patients should report their arrival here, as it is desirable for all documentation to be centrally prepared and maintained. There should be a counter for documentation and appointment procedures and a separate section with auditory privacy to allow for confidential discussions, e.g. on the implementation of the 'ten day rule' for female patients. A work station for a senior radiographer should also be provided in this area. (HBN, para. 4.3)

The main patient waiting space and associated bed trolley/wheelchair waiting space should be capable of being supervised by the reception staff. (HBN, para. 4.4)

Earlier decision	Ref	5.1 ENTRANCE, RECEPTION & DOCUMENTATION
	A	One main entrance will be required for: (a) all patients [ ] (b)
2A	B	Separate entrances will be required for: (a) in-patients/out-patients [ ] (b) accident and emergency patients [ ] (c)
	C	Patients may be: (a) examined on arrival, without appointment [ ] (b) given an appointment [ ] (c)
2A	D	Patients may come to the department: (a) on foot, accompanied [ ] (b) on foot, unaccompanied [ ] (c) in wheelchairs [ ] (d) on stretcher trolleys [ ] (e) in beds [ ] (f)
	E	Patients may be divided by type of examination, including: (a) simple examination requiring no undressing [ ] (b) simple examination requiring undressing [ ] (c) examination by appointment following dietry preparation [ ] (d) complex examination, by appointment, requiring special equipment, preparation and general anaesthetic [ ] (e)
	F	Patients will be directed to the appropriate waiting or sub-waiting area by: (a) a receptionist [ ] (b)
	G	Appointments will be made: (a) in blocks [ ] (b) individually [ ] (c) in a combination of block and individual bookings [ ] (d) only for those examinations requiring preparation [ ] (e)
	H	All patients will be recorded: (a) at the main reception desk on arrival [ ] (b) at separate reception points associated with sub-waiting areas [ ] (c) in the radiodiagnostic rooms [ ] (d) at the completion of the examination at reception [ ] (e)

5.1 ENTRANCE, RECEPTION & DOCUMENTATION (contd.)

COMPUTER SYSTEMS

Computer systems are likely to have advanced sufficiently as to be in general use when departments designed to the guidance given in the HBN are commissioned. At least part of the patient data storage is likely therefore to use a system with computer terminals located in such areas as reception, current film store, sorting and collating, the clerical accommodation and possibly in the reporting areas.

The overall area required for these activities may be affected by the kind of system adopted and in particular, the degree to which computerisation is used. Systems may provide operational convenience plus considerable savings in both capital and revenue costs.

PROJECT TEAMS SHOULD CONSIDER THE INSTALLATION OF A COMPUTER SYSTEM IN ANY NEW PROJECT, POSSIBLY CO-ORDINATED WITH A SIMILAR SYSTEM IN THE PATIENTS' SERVICES DEPARTMENT. (HBN, para.3.18)

It should be borne in mind that the power requirements and cable distribution arrangements for such systems will affect the engineering requirements of the radiodiagnostic department. (HBN, para. 3.18)

MASTER INDEX/REPORT INDEX/DIAGNOSTIC INDEX

Data storage should be adjacent to or form part of the reception/appointments area. Whilst it is common practice at the present time for patient data to be held on cards in filing cabinets or in electronically-operated retrieval units, it is probable that computerised systems currently being developed will supersede these methods. (HBN, para. 4.8)

CURRENT FILM STORAGE

The Building Note assumes that X-ray films of patients examined during the last two years, including any previous films of these patients, will be stored in the radiodiagnostic department in correctly-sized envelopes which may also contain reports. (HBN, para. 4.9)

Earlier decision | Ref

5.1 ENTRANCE, RECEPTION & DOCUMENTATION (contd.)

A Patient interviews may take place:
(a) in an audibly private section of the reception area [ ]
(b) in a separate office [ ]
(c)

B Patients will be registered:
(a) using their hospital or accident and emergency number [ ]
(b) using an X-ray registration number [ ]
(c)

C Patients will be registered:
(a) using manual procedures [ ]
(b) using manual procedures with mechanical aids [ ]
(c) using a computer terminal [ ]
(d) via the patient services department [ ]
(e) direct with central registration [ ]
(f)

D The master index sited in reception/records will consist of:
(a) cards in filing cabinets [ ]
(b) computerised system [ ]
(c)

E Patients' X-ray films/reports will be kept in the department for:
(a) _____ years
(b)

F After such time(s) all records and films will be:
(a) transferred to the central records library [ ]
(b) transferred to a separate store for _____ years [ ]
(c) destroyed [ ]
(d)

5.1 ENTRANCE, RECEPTION & DOCUMENTATION (contd.)

MINIATURISATION AND MICROFILMING

Project teams will need to consider the cost implications of storage of reduced size films within the department, compared with storing full-sized films elsewhere. Current DHSS guidance on the storage of records (HC(80)7) should be borne in mind. (HBN, paras 2.20, 2.21)

Films may be reduced in two ways:

(a) Miniaturisation

This is the reduction of full-size X-ray films to 100mm square which can normally be satisfactorily viewed without magnification. The miniaturisation process can readily be undertaken within the department with appropriate equipment, either immediately after the examination or selectively, subsequent to reporting.

(b) Microfilming

This is a reduction of full-size X-ray films to a smaller format such as 35mm, which requires magnification for viewing. It may also be convenient similarly to reduce other radiological data to enable it all to be viewed simultaneously. This process is not easily undertaken within the department and normally requires the services of a commercial organisation.

Earlier decision | Ref

5.1 ENTRANCE, RECEPTION & DOCUMENTATION (contd.)

A Miniaturisation of X-ray films:
(a) will not be undertaken [ ]
(b) will be carried out selectively subsequent to reporting [ ]
(c) will be carried out prior to reporting [ ]
(d)

B Miniaturisation of X-ray reports:
(a) will be carried out immediately [ ]
(b) will be carried out subsequently [ ]
(c) will not be undertaken [ ]
(d)

C Microfilming of X-ray films and reports will be undertaken after:
(a) two years [ ]
(b) will not be undertaken [ ]

5.2 WAITING AREAS

WAITING AREAS

The main waiting space for patients and their companions should be easily accessible from the entrance to the department and be overseen from the reception area. It should have a comfortable and relaxing environment with domestic-type finishes and furnishings. Natural light and ventilation are desirable. (HBN, para. 4.5)

An area, separate from the other waiting areas, should be provided for patients on beds or trolleys to wait in before diagnostic procedures. It may also be desirable for patients in wheelchairs to wait here rather than the main waiting area. The space allowed should reflect which option is chosen. In this area circulation space will be required for nurses or others attending the patient and for additional equipment which may be on trolleys. The waiting area may be a recess off the relevant circulation space and should be observable from the reception point. Curtaining should be provided for privacy when required. (HBN, para. 4.6)

A holding and recovery area will be required for patients in bed or on a trolley who require infusions or other similar procedures prior to investigation and for those who are recovering from anaesthetics. Emergency resuscitation equipment should be based here. The amount of space required for parking beds or trolleys will depend upon the number and type of procedures carried out in the specialised rooms. Each bed or trolley space should be able to be curtained off for privacy. (HBN, para. 4.40)

Earlier decision	Ref	5.2 WAITING AREAS
	A	The main waiting area will be required: (a) near to the entrance to the department [ ] (b) overseen by the reception point [ ] (c)
7A,B	B	The main waiting area will accommodate: (a) all patients on arrival [ ] (b) patients' escorts [ ] (c) patients awaiting return to origin following examinations [ ] (d) patients awaiting processed films to return to clinician [ ] (e)
7A,B	C	Separate sub-waiting areas will be required for: (a) accident and emergency patients [ ] (b) undressed patients prior to or subsequent to examination [ ] (c) patients who may remain in the department for most of the day [ ] (d)
7D	D	Parking space for beds, trolleys and wheelchairs will be required: (a) near reception [ ] (b) near to main waiting area [ ] (c) adjacent to each sub-waiting area [ ] (d) within each sub-waiting area [ ] (e)
	E	Holding and recovery space which can accommodate beds and trolleys will be required overlooked from the nurse base and associated with the: (a) special procedures room [ ] (b) fluoroscopy room(s) [ ] (c) urography room(s) [ ] (d) lavage room(s) [ ] (e)

5.3 PATIENT CHANGING, PREPARATION & EXAMINATION

CHANGING CUBICLES

Cubicles should be planned in groups and be associated with the sub-waiting areas. They would normally be of a single-door type and should provide facilities for patients to dress and undress in privacy and for the secure storage of clothing during their examination. Separate administrative arrangements should be made for the safety of valuables. Cubicles should have some means of identification, e.g. be numbered or colour-coded both inside and out. Three changing cubicles will generally be required to serve each diagnostic room. One of the cubicles in each group should be suitable for use by assisted, ambulant patients accompanied by an escort. It is assumed that wheelchair patients will be taken directly into the radiodiagnostic room. (HBN, para. 4.15)

ALTERNATIVELY CUBICLES MAY BE OF A PASS-THROUGH TYPE WITH A DOOR AT EITHER END, ONE OF WHICH OPENS DIRECTLY INTO A DIAGNOSTIC ROOM AND MUST THEREFORE BE RADIATION-PROTECTED. THESE DOORS ARE COSTLY TO PROVIDE AND RESTRICT THE USE OF WALL SPACE IN THE DIAGNOSTIC ROOM. (HBN, para. 4.16)

LAVAGE ROOMS

A lavage room containing W.C. and bidet, suitable for both ambulant and trolley patients, should be provided for those patients who require colonic lavage. An additional, smaller, room for ambulant patients only may be required for larger departments. All lavage rooms should be convenient to the fluoroscopy rooms they serve. (HBN, para. 4.43)

SANITARY FACILITIES

The number of patients' WCs required will depend on the size of the department. They should be located convenient to the main and sub-waiting areas. At least one such W.C. should be of the wheelchair type. (HBN, para. 4.44)

Sufficient assisted WCs with bidets should be provided for patients' use on completion of barium enema examinations. These WCs should be immediately adjacent to, but should not have direct access from, the fluoroscopy rooms. For patient privacy, access to these WCs should be screened from the main circulation space and sub-waiting area. (HBN, para. 4.45)

There should also be a W.C. adjacent to any room used for urographic examinations (Appendix III, para. 7 of the HBN) or where the state of the bladder is an integral part of the examination, as in many ultrasound investigations. (HBN, para. 4.46)

Earlier decision	Ref	5.3 PATIENT CHANGING, PREPARATION & EXAMINATION
	A	Patients may dress and/or undress with or without assistance in: (a) a cubicle [ ] (b) the radiodiagnostic room [ ] (c) the lavage room(s) [ ] (d) the recovery/holding area [ ] (e) centralised type of changing in the department [ ] (f)
	B	Patients' clothing and personal items will be: (a) left in the changing cubicle [ ] (b) kept with them (e.g. in a basket) whilst being examined [ ] (c) left in a locker in the changing cubicle [ ] (d) left in a locker outside the changing cubicle [ ] (e)
9C	C	Patients who have undressed and put on a dressing gown will: (a) wait in the changing cubicle until called [ ] (b) pass into a sub-waiting area [ ] (c)
	D	Sanitary facilities will be required: (a) near the main waiting area [ ] (b) near the sub-waiting area [ ] (c) adjacent to the fluoroscopy room [ ] (d) adjacent to the pyelography room [ ] (e) within the lavage suite [ ] (f) adjacent to the ultrasound room(s) [ ] (g)
	E	Lavage facilities will be required: (a) in the lavage suite with integral W.C. and bidet [ ] (b)
	F	Patients may be prepared for examination in: (a) a radiodiagnostic room [ ] (b) a lavage room [ ] (c) the holding and recovery area [ ] (d)

5.3 PATIENT CHANGING, PREPARATION & EXAMINATION (contd.)

RADIODIAGNOSTIC ROOMS

In broad terms, diagnostic rooms fall into two categories: general purpose rooms and specialised rooms. Decisions on individual room functions and layouts should be taken by the project team in consultation with a radiologist and superintendent radiographer from the department concerned and a radiological engineer. Wherever possible, all these rooms should have natural lighting but will require mechanical ventilation; some specialised rooms may also need the ventilation air to be cooled. (HBN, para. 4.19)

Some kinds of interventional radiology require the staff to wear heavy protective garments for extended periods of time. Under certain circumstances a degree of asepsis is necessary. These, and other procedures, such as ultrasound, are usually carried out in low-level illumination. Rooms used for these procedures may require to be cooled. In addition, depending on the specific function, they may require other engineering facilities. (HBN, para. 4.24)

IN SELECTING DIAGNOSTIC ROOM LOCATIONS, CARE SHOULD BE TAKEN TO RELATE THE SPECIFIC ROOM ACTIVITY TO ITS POSITION WITHIN THE DEPARTMENT. TO MINIMISE PATIENT AND STAFF TRAFFIC, THE DIAGNOSTIC ROOMS WITH A HIGH PATIENT-THROUGHPUT SHOULD BE SITUATED NEAR TO RECEPTION, AND THOSE FOR MORE PROTRACTED PROCEDURES FURTHEST AWAY. (HBN, PARA. 4.20)

ANAESTHETIC ROOM/BAY

Project teams will need to consider the frequency of interventional radiology requiring anaesthesia which in exceptional circumstances may justify separate provision. If this is considered necessary it should be located adjacent to the special procedures room, and should include the same piped gases, and vacuum, and gas scavenging system used in special procedures rooms. (HBN, para. 4.93)

Earlier decision	Ref	5.3 PATIENT CHANGING, PREPARATION & EXAMINATION (contd.)
3D 4B	A	General purpose radiodiagnostic rooms may be used also for the following procedures: (a) accident (including skulls) [ ] (b) accident (including dental unit) [ ] (c) simple tomography [ ] (d) urography [ ] (e) paediatric [ ] (f)
4B 4D	B	Exclusive-use radiodiagnostic rooms will be provided for: (a) special procedures/angiography [ ] (b) major fluoroscopy [ ] (c) contrast media examinations [ ] (d) urography [ ] (e) ultrasound [ ] (f) radioisotopes [ ] (g)
7E	C	An anaesthetic room adjacent to the special procedures room: (a) will be required [ ] (b) will not be required [ ] (c)
	D	A staff changing room adjacent to the special procedures room: (a) will be required [ ] (b) will not be required [ ] (c)

5.4 NURSING FACILITIES

NURSING FACILITIES

Nursing facilities, comprising the nurse base, clean utility area, patient holding and recovery area, and dirty utility room, should be provided and planned as a cluster of activity spaces in the vicinity of the specialised rooms. (HBN, para. 4.37)

NURSE BASE

A base is needed for the nursing staff. It should be planned as the focal point in the cluster of nursing facilities, and give direct observation of the patients in the holding and recovery area. Space is required for a desk and telephone for administration. Indicator lights for the patient/staff emergency call system and the Controlled Drugs cupboard should be located so they can be seen from the desk and circulation spaces. (HBN, para. 4.38)

PATIENTS' HOLDING AND RECOVERY AREA

A holding and recovery area will be required for patients in bed or on a trolley who require infusions or other similar procedures prior to investigation and for those who are recovering from anaesthetics. Emergency resuscitation equipment should be based here. The amount of space required for parking beds or trolleys will depend upon the number and type of procedures carried out in the specialised rooms. Each bed or trolley space should be able to be curtained off for privacy. (HBN, para. 4.40)

CLEAN UTILITY

A clean utility area should be provided for the storage and assembly of clinical requisites used in the radiodiagnostic rooms. These include sterile supply items, pharmacy supplies including drugs, Controlled Drugs, contrast media, and other non-sterile clinical supplies. Certain pharmaceuticals used during barium examinations may also be stored and prepared in this area. Trolleys will be "laid up" here for all specialised examination sessions. (HBN, para. 2.49)

DIRTY UTILITY

A dirty utility room should be provided for the cleaning of trolleys and equipment used in clinical procedures which is not sent to the Sterilising and Disinfecting Unit (SDU). There should be a space for the temporary holding of materials for disposal and reprocessing, e.g. soiled linen for the laundry and items for return to the S.D.U. Special consideration should be given to the provision of a slop hopper with adequate drainage to avoid clogging by barium. A bedpan washer unit or macerator will also be required. (HBN, para. 4.42)

BARIUM PREPARATION AREA

In larger departments a barium preparation area may be required. (HBN, para. 4.94)

Earlier decision	Ref	5.4 NURSING FACILITIES
	A	A nurse base will be required: (a) in the vicinity of the special procedures room [ ] (b) with direct observation of the holding/recovery area [ ] (c) associated with the clean utility area [ ] (d) associated with the dirty utility area [ ] (e) with direct vision of alarm call indicator lights [ ] (f)
10E 11G	B	Recovery/holding facilities for patients recovering from anaesthetic or who require infusions or other similar clinical procedures will be required: (a) associated with the special procedures room [ ] (b) in the vicinity of the nurse base [ ] (c)
3D	C	A clean utility area will be required for: (a) making up trolleys [ ] (b) preparation of barium [ ] (c) dressings and instrument storage [ ] (d) storage of C.S.S.D. items and disposables [ ] (e) storage of pharmacy supplies and contrast media [ ] (f)
	D	A barium preparation area will be required for: (a) preparation of barium [ ] (b)
	E	A dirty utility room will be required for: (a) cleaning trolleys [ ] (b) disposal of dressings [ ] (c) disposal of barium [ ] (d) cleaning of used instruments prior to return for sterilisation [ ] (e) storage of empty pharmacy containers for return [ ] (f) holding of dirty linen for laundering [ ] (g)

5.5 FILM PROCESSING

FILM PROCESSING

Developments in processing technology have made it possible to process most X-ray films without the use of dark rooms. The HBN has therefore allowed for daylight automatic processing, and daylight automatic processing with a dark room facility. (HBN, para. 4.47)

DAYLIGHT AUTOMATIC PROCESSING

Daylight automatic processing and film handling can be undertaken in areas of natural daylight or artificial light by the use of light-proof film feeding devices. A number of commercial daylight systems are available with differing arrangements for loading and unloading film cassettes. These can be broadly classified into integrated and dispersed systems. In the former, the unloading and re-loading of the cassettes, as well as the processing of film, are all undertaken in the one unit. With dispersed systems, the re-loading of the cassettes is separated from the other processing functions, thus enabling this activity to be undertaken independently. (HBN, para. 4.49)

The choice of a particular system will have a bearing on the layout of the processing areas and their juxtaposition to the radiodiagnostic rooms. The total area provided should be related to and adequate for the number of radiodiagnostic rooms in the department. The areas containing automatic loaders or dispensers can with benefit be capable of having light excluded to enable some equipment malfunctions to be rectified without spoiling unused films. In such situations safe-lighting should be provided. In all cases a sink for cleaning the processor racks must be sited conveniently. (HBN, para. 4.50)

Each department should be equipped with automatic processors at a ratio of one to every two radiodiagnostic rooms. If an automatic processor is to serve one item of radiodiagnostic equipment only, it should not be included in this calculation. All departments should have at least two automatic processors, one for normal use and a smaller one of lower capacity as a standby in case of breakdown. In departments with two processors or more, a separate standby processor will not be required. However, allowance may have to be made for specialised processing requirements such as dental films. The design of mechanical and electrical services should allow for each piece of equipment to be serviced independently. Their siting must be considered in the context of local requirements and workload demands, and be so arranged as to reduce staff movement to a minimum. (HBN, para. 4.51)

For example, an area with one processor can be located between a pair of radiodiagnostic rooms, or two processors may conveniently be installed in a common processing/viewing area serving a cluster of four radiodiagnostic rooms. In certain situations it may even be desirable to site a processor within a radiodiagnostic room. The overall policy should be such that alternative processing facilities are always available within a reasonable distance and thus ensuring that a processor breakdown does not totally affect one type of examination. (HBN, para. 4.52)

Earlier decision | Ref

5.5 FILM PROCESSING

A Film processing will be carried out by;
(a) one daylight automatic processing unit with low capacity back-up processor [ ]
(b) two daylight automatic processing units [ ]
(c) three daylight automatic processing units [ ]
(d)

5.5 FILM PROCESSING (contd.)

DAYLIGHT AUTOMATIC PROCESSING WITH A DARK ROOM FACILITY

Although the use of daylight processing is recommended, departments will still require a dark room for some facilities, e.g. loading of film magazines and cine-cassettes and possibly dental film processing. At least one processor should therefore be sited in a darkroom, but the design of the room and choice of equipment can be such that when not required as a darkroom it can function in normal light conditions as a daylight system. (HBN, para. 4.53)

The processor should be positioned so that the "feed-in" end is in the safe-lit area and the "output" end in the adjacent viewing/checking/immediate reporting area. When the door is closed, magazines and cine-cassettes may be passed into the darkroom via a cassette hatch. There will be a need for safe-lighting (coupled to an exterior warning light), a white light, bench space for unloading and loading cassettes, and cupboards for storage. An intercom station may also be required. (HBN, para. 4.54)

MANUAL PROCESSING

If exceptional local circumstances require the provision of manual processing, a case should be made for the additional space required. (HBN, para. 4.48)

Earlier decision	Ref	5.5 FILM PROCESSING (contd.)
14A	A	Specialised processing facilities will be required for: (a) dental film [ ] (b) special emulsions [ ] (c) small format film (e.g. 100mm cut; 105mm or 35mm roll film) [ ] (d)
14A	B	Processing of film from remote units will be carried out: (a) in the main department [ ] (b) locally using automatic processing [ ] (c) locally using manual processing [ ] (d)
14A	C	Cassettes will be loaded with unexposed film: (a) at the time of cassette unloading and film processing [ ] (b) at separate dispensers near the processor [ ] (c) at separate dispensers remote from the processor [ ] (d)
	D	Cassettes with exposed film will be unloaded: (a) directly into the processor [ ] (b) into an intermediate transport magazine [ ] (c)
	E	Exposed film will be marked with patients' details: (a) prior to or immediately after the time of exposure [ ] (b) immediately before processing [ ] (c)
	F	Film will be discharged from processor: (a) into viewing/checking area [ ] (b)
	G	Light proofing will be required: (a) where one automatic processor is installed [ ] (b)

5.6 FILM VIEWING, CHECKING & IMMEDIATE REPORTING

The proper location and function of the viewing, checking and immediate reporting areas in relation to the radiodiagnostic rooms and processing areas is paramount to the speed and efficiency of the department. They should be adjacent to, or part of, each processing area and should contain worktops and viewing facilities. Space will be required to enable radiographers to check the processed films and to carry out a preliminary sorting. Immediate film reporting by a radiologist is required on occasions by the Accident and Emergency Department and during out-patient sessions. This can be undertaken here or in the central reporting area. (HBN, para. 4.59)

Separate viewing, checking and immediate reporting areas should be provided for radiodiagnostic rooms which have different functions. For example, one area should be allocated to that section of the department designated to serve the Accident and Emergency Department. Another area, or a designated section of a large area, should be available for the viewing and checking of films resulting from examinations performed by radiologists, e.g. barium meals, enemas and angiography, because of the volume of films these procedures produce. (HBN, para. 4.60)

SILVER RECOVERY

EQUIPMENT FOR THE RECOVERY OF SILVER FROM USED PROCESSING AND CHEMICALS IS ESSENTIAL.THIS EQUIPMENT MAY SERVE MORE THAN ONE PROCESSOR WITHIN THE SAME AREA. (HBN, para. 4.57)

(The various methods available for the recovery of silver are discussed in the Appendix of the HBN. Local security arrangements must be made to ensure the safety of the equipment from unauthorised interference and also for the safe custody of recovered silver flake.
(HBN, para. 4.57)

Earlier decision | Ref

5.6 FILM VIEWING, CHECKING & IMMEDIATE REPORTING

A The viewing/checking area will be equipped for:
(a) viewing/checking area of processed films on multiple viewers - standing/sitting [ ]
(b) quality control - standing/sitting [ ]
(c) preliminary film and document sorting - standing/sitting [ ]
(d) immediate reporting on urgent cases [ ]
(e) processor chemical replenishment with automatic mixer [ ]
(f) processor chemical replenishment with reservoir tanks [ ]
(g) silver recovery [ ]
(h) dispatch of films required by clinicians [ ]
(i) storage of spoilt X-ray film for salvage purposes [ ]
(j)

B Silver recovery will be effected using:
(a) steel wool system [ ]
(b) electrolytic system without fixer recirculation [ ]
(c) electrolytic system with fixer recirculation [ ]
(d) independent units servicing individual processors [ ]
(e) one unit to serve more than one processor [ ]
(f)

5.7 SORTING, REPORTING, DISPATCH & FILING

SORTING AND COLLATING

These activities should be carried out in an area adjacent to reception/ data storage. To facilitate an easy flow of work, an open-planned area comprising sorting and collating/dispatch and return, and current film storage, has many advantages. The accommodation should be near to the radiologists' offices and, in larger departments, to the central reporting room.

Ample worktop space with viewing facilities and storage racks will be required for the various activities undertaken in this area. (HBN, para. 4.63)

CENTRAL REPORTING ROOM

A central reporting facility located near to the sorting and collating area will be required in the majority of departments, from which radiological staff will be able to provide a regular flow of reports, and provide a reference point for obtaining radiological opinions. As radiological consultations also frequently form a part of the diagnostic conferences associated with clinical ward rounds, this space should be planned large enough to allow for this additional function. Provision should be made for the radiologist, his staff and one or more clinical teams. (HBN, para. 4.68)

In small departments, however, it is not envisaged that a separate central reporting space will be needed and the clinical conference function can be allowed for by providing one radiologist's office with additional space. (HBN, para. 4.69)

At the present time the results of radiological investigations are mainly presented for reporting as radiographs or as photographs taken directly from TV monitors or image intensifiers. Increasingly, however, diagnostic images are being produced in electronic form and are viewed primarily on TV monitors. The suggested three types of reporting station appropriate for a central reporting room are as follows:

a) one having a minimum of two quadruple wall-mounted illuminators;
b) one equipped with an automatic multi-viewer;
c) one having TV monitors, together with equipment to produce copies of TV images for distribution to clinicians. If patients' records are computerised the same monitors may be used as computer terminals by the provision of video-mixers.

The type of reporting station will be dictated by local requirements. For large departments, one of each type is likely to be needed. (HBN, para. 4.70)

Natural lighting will not be required but if windows are provided the room should be capable of being dimmed. Mechanical ventilation is, in any event, recommended. (HBN, para. 4.71)

The radiologists, after viewing the diagnostic images, may dictate their reports directly to a typist in the central reporting room or to a dictating machine for subsequent typing. In order that these activities may take place concurrently, consideration should be given to providing sound attenuation. (HBN, para. 4.72)

Earlier decision | Ref

5.7 SORTING, REPORTING, DISPATCH & FILING

A The sorting area will be equipped for:
(a) checking that current and previous X-ray (if any) and documentation are present prior to release for reporting [ ]
(b) collation of films and documents in cases where previous records were not initially available [ ]
(c) sorting unreported films on return from clinicians or ward [ ]
(d) retrospective collation of current and previous films that were the subject of an 'immediate' report [ ]
(e) arrangements to ensure that a 24-hour absence limit for unreported films is not exceeded [ ]
(f) sorting films for reporting into categories [ ]
(g) checking films and documentation returned from wards and departments prior to release for filing [ ]
(h) holding of films for viewing by visiting clinicians [ ]
(i) dispatch of films to wards, clinicians and other hospitals [ ]
(j)

B Reporting may be undertaken in:
(a) the processing/checking area (immediate reporting) [ ]
(b) a consultant's office [ ]
(c) a central reporting room [ ]
(d) a diagnostic room [ ]
(e)

C Reports for typing will be given:
(a) directly to typist [ ]
(b) to shorthand secretary [ ]
(c) directly to dictaphone [ ]
(d) via a telephone dictation system [ ]
(e) using a computer link [ ]
(f)

D Typing of reports will be done:
(a) by departmental typists [ ]
(b) by typing pool typists [ ]
(c)

E After reporting films and reports may be:
(a) sent for filing [ ]
(b) sent to ward/department [ ]
(c) sent to clinician [ ]
(d)

F After reporting, reports only may be:
(a) sent to clinician [ ]
(b)

5.7 SORTING, REPORTING, DISPATCH & FILING (contd.)

FILM DISPATCH AREA

This area is used for the dispatch and return of films and reports and queries concerning their whereabouts. Ample worktop space and storage racks will be required for the preparation of films and reports for dispatch. Worktop space will also be required for the sorting of returned films in preparation for filing. The films may:

a) accompany the report to the clinician to be subsequently returned for filing in the department;
b) be retained in the ward or department during the patient's course of treatment and be returned for filing when the patient is discharged;
c) be sent directly for filing, e.g. general medical practitioner referrals.

(HBN, para. 4.75)

FILM STORAGE AND FILING

It is assumed that X-ray films of patients examined during the last two years, including any previous films of these patients, will be stored in the radiodiagnostic department in correctly-sized envelopes which may also contain reports. (HBN, para. 4.9)

All other films should have different arrangements made for their storage. If it is decided to retain archival films in their full-size format, they should be stored conveniently near the department or with central medical records. The filing system should be compatible with the main medical records. Mobile racking, whilst not suitable for current filing, may be considered for archival storage where continuous ready access is not required, thus utilising its space-saving potential. Reference should be made to local and national statistics to confirm the area required for this storage in the light of the consistent increase in diagnostic radiology demands. The Departmental Cost Allowance for such archival storage is included in that for medical records. (HBN, para. 4.12)

CLERICAL ACCOMMODATION

Accommodation will be needed for the transcription and typing of radiologists' reports and for the preparation of the reports and associated radiographs for distribution or filing. It may be desirable for the secretary/typist attached to the radiologist in administrative charge of the department to have a single room adjacent to his office. Other typists may share accommodation. Natural lighting and ventilation are desirable. (HBN, para. 4.74)

Earlier decision	Ref	5.7 SORTING, REPORTING, DISPATCH & FILING (contd.)
	A	Films and reports will be dispatched from: (a) the secretary's office [ ] (b) the typing office [ ] (c) the sorting area [ ] (d) the dispatch area [ ] (e)
	B	The location of these whilst away from the department will be recorded in: (a) the dispatch area [ ] (b) the film storage area [ ] (c)
8D	C	Film filing will be: (a) all held in the X-ray department for a period of _____ years (b) partially held in X-ray department for a period of _____ years, with remainder held (SPECIFY WHERE) for a period of _____ years. _____ (c)
8C	D	Secretarial and reporting services will be provided: (a) within the department [ ] (b) within the department with additional facilities provided from outside the department [ ] (c) using central reporting system [ ] (d) centrally, with additional facilities provided within the department [ ] (e) using a computer exclusive to the department [ ] (f) using a computer with data linkage to other equipment outside department [ ] (g)

5.8 STAFF EDUCATION

STAFF EDUCATION

Appropriate colleges should be consulted at the initial planning stage on those departments where it is envisaged that radiologists and student radiographers will be undergoing training. (HBN, para. 3.19)

Nurse learners are likely to be present for sessional attendance only.

SEMINAR ROOM/LIBRARY

It is essential that accommodation for multi-disciplinary radiological conferences, of up to 20 persons, should be provided within the hospital. For smaller departments it is anticipated that this accommodation will be shared with other users and may be sited outside the department, possibly in a hospital education centre. In larger departments, however, it may be necessary to site this facility within the radiodiagnostic department. This will be a matter for project decision. (HBN, para. 4.90)

Earlier decision | Ref

5.8 STAFF EDUCATION

A Clinical instruction and teaching will be carried out in the department for:
(a) radiology students [ ]
(b) radiography students [ ]
(c) post-qualification radiologists [ ]
(d) general practitioners [ ]
(e) nurse learners [ ]
(f)

B This will take place in:
(a) the consultant's office [ ]
(b) the viewing areas [ ]
(c) the radiodiagnostic rooms [ ]
(d) the education centre [ ]
(e) the central reporting/diagnostic conference room [ ]
(f)

C Formal teaching of medical/paramedical staff will be carried out in:
(a) the education centre [ ]
(b)

D Multidisciplinary radiological meetings/conferences will be held in a seminar room:
(a) elsewhere in the hospital [ ]
(b) within the department [ ]

5.9 MANAGEMENT & STAFFING

RADIOLOGISTS' OFFICES

Radiologists' offices will be required for viewing and reporting, for consultation with colleagues and others and for general administrative work. There should be an office for each full-time consultant and whole-time equivalent consultant. There should also be a limited amount of storage space for books, periodicals and films. (HBN, para. 4.66)

Offices should be grouped together with easy access to the specialised diagnostic rooms, secretarial facilities and, in larger departments, to the central reporting room. Natural lighting and ventilation is desirable and the rooms should be capable of being dimmed. (HBN, para. 4.67)

SUPERINTENDENT RADIOGRAPHER'S OFFICE

The Superintendent Radiographer's office will be required for general administrative work, viewing of films, consultations and discussions with colleagues and others. Where possible, the office should be located close to the centre of activities within the department. Natural lighting is desirable, and the room should be capable of being dimmed. There should be a limited amount of storage space for books and periodicals and films. (HBN, para. 4.76)

Earlier decision | Ref

5.9 MANAGEMENT & STAFFING

A The following staff will require office accommodation in the department:
(a) the consultant radiologist in administrative charge [ ]
(b) other radiologists [ ]
(c) other medical staff [ ]
(d) the superintendent radiographer [ ]
(e) the deputy superintendent radiographer [ ]
(f)

5.9 MANAGEMENT & STAFFING (contd.)

Earlier decision | Ref

5.9 MANAGEMENT & STAFFING (contd.)

A The estimated number (for planning purposes) of professional and technical staff working in the department will be:

	Full-time	Part-time	WTE
(a) superintendent radiographers			
(b) senior radiographers			
(c) radiographers			
(d) darkroom technicians			
(e)			
TOTAL:			

7F B The estimated number of secretarial/clerical staff (for planning purposes) working in the department will be:

(a) personal secretaries			
(b) clerk/typists			
(c) clerks/general			
(d) clerks/receptionists			
(e) clerks/filing			
(f)			
TOTAL:			

13A C The estimated number of nursing staff (for planning purposes) working in the department will be:

(a) sister			
(b) staff nurse			
(c) state-enrolled nurse			
(d) learners			
(e) nursing auxiliaries			
(f)			
TOTAL:			

D The estimated number of medical staff (for planning purposes) working in the department will be:

(a) Consultant Radiologist			
(b) Registrar Radiologist			
(c) S.H.O. Radiologist			
(d)			
TOTAL:			

5.9 MANAGEMENT & STAFFING (contd.)

PORTERS' BASE

A space, also capable of being seen from reception, should be provided near the entrance to the department for porters. A departmental intercom station may be needed. (HBN, para. 4.7)

Earlier decision | Ref

5.9 MANAGEMENT & STAFFING (contd.)

A Portering services will be provided:
(a) exclusively for the department on a permanent basis [ ]
(b) seconded to the department [ ]
(c) from central portering services on demand [ ]
(d)

B A porters' office/waiting space will be required:
(a) near the entrance to the department [ ]
(b) overlooked from reception [ ]
(c)

C Responsibility for domestic services will be held by:
(a) a domestic manager [ ]
(b) a domestic supervisor [ ]
(c) a housekeeper [ ]
(d)

5.10 STAFF FACILITIES

STAFF CHANGING AND WCs

Project teams will need to bear in mind the staff changing requirements, as central staff changing is not normally considered appropriate for radiographers. This is due in part to the need to ensure secure and safe storage within the department of the radiation monitoring devices individually worn on radiographers' uniforms. (HBN, para. 4.85)

Female radiographers should be provided with a changing room, and appropriate accommodation should also be provided for male radiographers. All should have full-length lockers for the storage of personal clothing, uniforms and personal items. (HBN, para. 4.86)

Staff working in offices should be able to lock personal items in desks, and as they will not normally use centralised staff changing, coat hanging facilities will be needed in the offices. (Information about coat hanging in offices is given in the 'Common Activity Spaces' building note, Volume 1.) (HBN, para. 4.87)

STAFF ROOM

A staff room will be required for general use by all staff of the department. Ideally, it should be sited near to the diagnostic rooms, particularly those used for accident and emergency. It is desirable that the room should have natural lighting and ventilation and a pleasant environment. As this room will be used 24 hours a day, the provision of a couch or divan would be useful so that staff working at night can rest. Beverage-making and cooking facilities are required. (HBN, para. 4.84)

Earlier decision	Ref	5.10 STAFF FACILITIES
21A-D	A	The estimated number of staff working in the department during a peak period will be: Male_____ Female_____ TOTAL:_____
	B	Staff will use: (a) the central changing accommodation of the hospital with small lockers for personal possessions provided in the department [ ] (b) departmental changing accommodation [ ] (c) central changing accommodation, with the exception of the following staff (SPECIFY): (d) _____ (e) _____ (f) _____ (g)
	C	Sanitary facilities for staff will be sited: (a) adjacent to staff offices and rest room facilities [ ] (b) outside the department [ ] (c)
	D	Rest room facilities will be provided: (a) by a staff rest room in the department [ ] (b)
16C	E	Staff meetings and discussions will be held: (a) in the staff rest room [ ] (b)
5D	F	Accommodation for night staff on call will be available: (a) in a central area of the hospital [ ] (b) in the staff rest room [ ] (c)

5.11 CATERING

Earlier decision	Ref	5.11 CATERING
	A	Where patients are allowed to eat, meals will be available: (a) from the central catering department [ ] (b) in the out-patients' snack bar [ ] (c)
	B	Beverages will be provided in the department for patients by: (a) a beverage point in the staff room [ ] (b) the central catering department [ ] (c)
23D-F	C	Staff will take their: (a) main meals in the central restaurant or snack bar [ ] (b) beverages/light snacks in the central restaurant or snack bar [ ] (c) beverages/light snacks in the department [ ] (d) beverages in the department [ ] (e)
	D	Washing-up facilities will be provided: (a) centrally outside the department [ ] (b) for beverage utensils only, in the department [ ] (c)

5.12 SUPPLY & STORAGE

Earlier decision | Ref

5.12 SUPPLY & STORAGE

A Storage/parking space in the department will be required for:
(a) general equipment and instrument trolleys [ ]
(b) mobile X-ray units [ ]
(c) anaesthetic equipment [ ]
(d) patient trolleys [ ]
(e)

B Storage space in the department will be required for (SPECIFY NUMBER OF DAYS STOCK):

(a) linen _____

(b) unused film _____

(c) chemicals (X-ray processing) _____

(d) current films _____

(e) X-ray reports and master index _____

(f) sterile supplies _____

(g) pharmacy supplies _____

(h) cleaning materials _____

(i) medical and surgical sundries _____

(j) stationery _____

(k) disposables (SPECIFY): (l) _____
(m) _____
(n) _____

(o) catering provisions - milk _____

(p) contrast media _____

(q)

C The supply deliveries to be controlled by a topping-up system will be:
(a) linen [ ]
(b) medical and surgical sundries [ ]
(c) sterile supplies (including syringes) [ ]
(d) pharmacy supplies [ ]
(e) cleaning materials [ ]
(f) stationery [ ]
(g)

5.12 SUPPLY & STORAGE (contd.)

MOBILE EQUIPMENT

Parking space for mobile X-ray units will be required, including where appropriate, facilities for charging mobile X-ray units with integral batteries. The space should be provided convenient to the appropriate entrance to the department. (HBN, para. 4.82)

Earlier decision	Ref	5.12 SUPPLY & STORAGE (contd.)
	A	The supply deliveries to be controlled by a requisition system will be: (a) X-ray film [ ] (b) medical and surgical sundries [ ] (c) sterile supplies (including syringes) [ ] (d) pharmacy supplies [ ] (e) cleaning materials [ ] (f) stationery (specialised) [ ] (g) X-ray chemicals [ ] (h) photographic film [ ] (i) stationery (general) [ ] (j) contrast media [ ] (k)
	B	The supply deliveries to be on an annual order with monthly delivery will be: (a) X-ray film [ ] (b) X-ray chemical [ ] (c) photographic film [ ] (d) contrast media [ ] (e)
2B	C	Mobile X-ray equipment will be parked in the department for use in the: (a) accident and emergency department [ ] (b) wards [ ] (c) operating department [ ] (d) I.T.U. [ ] (e) C.C.U. [ ] (f)
2B	D	Mobile X-ray equipment will be kept in the department for use in the: (a) accident and emergency department [ ] (b) wards [ ] (c) operating department [ ] (d) I.T.U. [ ] (e) C.C.U. [ ] (f)
	E	Portable equipment may be used outside the hospital for: (a) domiciliary visits [ ] (b) satellite unit visits [ ] (c) other hospital visits [ ] (d)

5.12 SUPPLY & STORAGE (contd.)

GENERAL STORE

Secure storage space should be provided to house small items of equipment used intermittently, e.g. instrument trolleys, cassette stands, contrast injector and anaesthetic equipment. Space will also be required for bulk storage of X-ray forms, stationery, paper towels, etc. Shelves should be provided for small miscellaneous items. (HBN, para. 4.78)

LINEN STORE

The provision of storage for the day-to-day working stock of linen will be required. Its size will be in accordance with the policy of the Whole Hospital. (HBN, para. 4.81)

UNUSED FILM STORE

A film store will be required for the storage of stock film of all the sizes in common use. It should be sited away from radiodiagnostic rooms or shielded from radiation and should be in a location which has a cool, constant environment. The weight of the film to be stored should be taken account of in the design and positioning of shelving. Security is also important. (HBN, para. 4.79)

CHEMICAL STORE

A storeroom, preferably situated near the processing areas, should be provided for storage of chemicals used in the processing of radiographs. Shelves will be required and account should be taken of the weight of the chemicals to be stored. Floor finishes should be impervious to chemical spillages. (HBN, para. 4.80)

RADIOISOTOPES

Information on premises and equipment for the preparation of radiopharmaceuticals is included in Health Building Note no. 29, "Pharmaceutical Department" (in preparation) and also in the "Guide to Good Pharmaceutical Manufacturing Practice", HMSO. (HBN, para. 1.5d)

Earlier decision | Ref

5.12 SUPPLY & STORAGE (contd.)

A Sterilising of instruments will be undertaken:
(a) solely in the C.S.S.D./S.D.U. [ ]
(b)

B Dressings, sundries and sterile items will be stored in the:
(a) clean utility [ ]
(b) supplies base [ ]
(c) recovery room [ ]
(d) radiodiagnostic rooms [ ]
(e) store room [ ]
(f) lavage room [ ]
(g)

C Sterile packs for special techniques will be stored in the:
(a) supply cupboards adjacent to the recovery room [ ]
(b) clean utility [ ]
(c) recovery room [ ]
(d) radiodiagnostic rooms [ ]
(e)

D Linen distribution will be by:
(a) topping-up system [ ]
(b) exchange trolley to department [ ]
(c) mini exchange trolley, topped up from major exchange trolley [ ]
(d) exchange trolley to each area of department [ ]
(e)

E Unused X-ray film will be stored in:
(a) a specific film store [ ]
(b) processing areas [ ]
(c)

F X-ray chemicals will be stored in:
(a) a specific chemical store [ ]
(b) processing areas [ ]
(c)

G X-ray contrast media and drugs will be stored in a:
(a) controlled drugs cupboard [ ]
(b) contrast media store [ ]
(c) refrigerator [ ]
(d) store room [ ]
(e)

H Radioactive isotopes will be stored (SPECIFY):
(a) _____

5.13 DISPOSAL & CLEANING

Earlier decision | Ref

5.13 DISPOSAL & CLEANING

A The system of disposal will be:
(a) soiled linen in bags, colour coded _____
(b) soiled dressings in bags, colour coded _____
(c) returnable items to C.S.S.D. in bags, colour coded _____
(d) waste for destruction in bags, colour coded _____
(e) labelled containers for C.S.S.D. items [ ]
(f) contaminated items in bags, colour coded _____
(g) returnable empties in labelled containers [ ]
(h)

B Soiled linen will be collected:
(a) daily [ ]
(b) twice daily [ ]
(c)

C Items for destruction will be collected:
(a) daily [ ]
(b) twice daily [ ]
(c)

D Returnable C.S.S.D. items will be collected:
(a) daily [ ]
(b) twice daily [ ]
(c)

E Returnable empties will be collected:
(a) daily [ ]
(b) twice daily [ ]
(c)

F Disposable sanitary items used will include:
(a) bedpans [ ]
(b) urinals [ ]
(c) vomit bowls [ ]
(d)

G Hand-drying in W.C. facilities will be by:
(a) disposable towels [ ]
(b) non-disposable towels, supplied by the hospital [ ]
(c) non-disposable towels, supplied by outside contract [ ]
(d) a hot-air hand-drying system [ ]
(e)

5.13 DISPOSAL & CLEANING (contd.)

Earlier decision	Ref	5.13 DISPOSAL & CLEANING (contd.)
22C	A	Cleaning will be carried out: (a) outside normal working hours [ ] (b) by domestic staff working in the department [ ] (c) partially by domestic staff working in the department and partially by domestic teams [ ] (d) using a central team for wall washing and special cleaning [ ] (e)

5.14 COMMUNICATIONS & OTHER ENGINEERING SERVICES

COMMUNICATIONS

The four types of communications systems which will normally operate within the radiodiagnostic department are:

a) Telephones.

Extensions from the PBX for communication with other departments and outside the hospital will be provided in accordance with the Whole Hospital telephone policy.

b) Patient/staff call system.

This system enables patients to call for assistance and staff to summon help in an emergency. The system should be installed throughout the department with call points in each patient area, e.g. WCs, changing cubicles and recovery area. The main termination panel should be located at the nurse base and repeated at reception and be clearly visible from the senior radiographer's desk, sited in this area. A switch-through facility to the Accident and Emergency department should be installed to cover emergencies outside normal working hours.

c) Departmental intercommunication system.

This system enables staff to call one another within the department. It may also be desirable to link the intercom system with the Accident and Emergency department for use outside normal working hours.

d) Hospital staff location system.

The staff location system employed throughout the hospital should give adequate cover for the radiodiagnostic department.

(HBN, para. 2.19)

FIRE SAFETY

At the time of writing, Departmental guidance on all aspects of fire safety is being prepared in a number of documents within the Health Technical Memoranda series. It is essential that project teams familiarise themselves with this guidance and the statutory regulations on the subject. In particular, the need for structural fire precautions and means of escape from the whole accommodation must be taken into account at the earliest possible planning stage. Guidance on fire safety as it applies to new health buildings and new parts of health buildings (e.g. extensions), is contained in HTM 81 'Fire Safety in Health Care Premises - Planning and Design of New Buildings' (a draft of this document has already been circulated within the NHS under the title 'Fire Safety in Health Buildings), dated September 1978. The importance of fire precautions in health care buildings is dealt with in HTM 83, Chapter 6 of which contains specific guidance relating to radiodiagnostic departments. (HBN, para. 3.5)

During the design stage it is important to establish those aspects of fire safety strategy which affect the design, configuration and structure of a project. The architect and engineer should discuss and verify their proposals with the local fire authority from the inception of the scheme, through to completion and ensure that the project team and all other planning staff are fully acquainted with the fire safety strategy for the design in terms of operation (staff responsibilities, etc.), equipment provision, and building and engineering layouts. (HBN, para. 3.6)

The principles of fire safety apply to new projects and to alterations and upgradings of existing buildings. When altering or upgrading the aim should be to eliminate any existing fire risks. (HBN, para. 3.7)

Earlier decision | Ref

5.14 COMMUNICATIONS & OTHER ENGINEERING SERVICES

A Telephone communication will be provided by:
(a) an appropriate PABX system, with suitable barring (as Whole Hospital) [ ]
(b) an appropriate PAX system, plus PBX system [ ]
(c)

B Intercom will be required:
(a) throughout the department to link all important areas with reception [ ]
(b) from reception to radiodiagnostic rooms [ ]
(c) from reception to darkrooms/processing areas [ ]
(d) from reception to offices/staff room [ ]
(e)

C Staff location will be via:
(a) pocket receivers issued to all essential staff [ ]
(b) an induction wire loop system [ ]
(c) a VHF/UHF system [ ]
(d) the intercom system [ ]
(e)

D Patient/staff call facilities will be required in the:
(a) recovery area [ ]
(b) W.C.s [ ]
(c) sub-waiting area [ ]
(d) lavage rooms [ ]
(e) bed/trolley waiting area [ ]
(f)

E Emergency staff/staff call facilities will be required:
(a) throughout the department to link with reception in case of cardiac arrest, etc. [ ]
(b) in the recovery area [ ]
(c) in the sub-waiting area [ ]
(d) in the lavage room(s) [ ]
(e) in all radiodiagnostic rooms [ ]
(f) in the bed/trolley waiting area [ ]
(g)

F Indicator lights for the controlled drugs cupboard will be placed:
(a) at the staff base [ ]
(b) at reception [ ]
(c) at the main switchboard [ ]
(d)

G Fire alarms, smoke doors and fire-fighting equipment will be provided:
(a) in accordance with Whole Hospital Fire Policy [ ]
(b)

5.14 COMMUNICATIONS & OTHER ENGINEERING SERVICES (contd.)

PIPED SERVICES

Information regarding piped medical gases is given in HTM22 and any subsequent published amendments. The location of outlets is indicated on the Activity Data sheets. (HBN, para. 5.39)

In the special procedures room where nitrous oxide is used, provision should be made for scavenging waste anaesthetic gases. Technical information relative to anaesthetic gas disposal systems is given in Doc.Eng. 423. Patients' recovery areas should be located to ensure adequate natural ventilation. (HBN, para. 5.40)

TEMPERATURE CONTROL

The possibility of excessive heat emission from some diagnostic equipment used for fluoroscopy, ultrasound or other special and often prolonged procedures involving a team wearing heavy protective clothing, may require that the supply of air to these rooms be mechanically cooled. Where this option is required, the plant capacity should be limited to that necessary to maintain an internal temperature of 25°C when the external ambient is 28°C. Where deep planning of other continuously-occupied spaces, e.g. offices, is unavoidable there will also be occasions when acceptable levels of comfort can only be maintained by air-cooling.

PLANNING SOLUTIONS OF THIS TYPE,HOWEVER, WILL BE EXCEPTIONAL AND NO PROVISION FOR COOLING PLANT HAS BEEN INCLUDED IN THE DEPARTMENTAL COST ALLOWANCE. (HBN, para. 5.27)

Earlier decision | Ref

5.14 COMMUNICATIONS & OTHER ENGINEERING SERVICES (contd.)

A Piped oxygen and medical vacuum services will be required in:
(a) all radiodiagnostic rooms [ ]
(b) recovery rooms [ ]
(c) special procedure radiodiagnostic room(s) [ ]
(d) accident and emergency radiodiagnostic room(s) [ ]
(e) fluoroscopy room(s) [ ]
(f)

B An anaesthetic gas scavenging system should be provided:
(a) in the special procedure radiodiagnostic room(s) [ ]
(b) in the anaesthetic room [ ]
(c)

C Temperature controlled environment will be required in:
(a) radiodiagnostic room [ ]
(b) processing areas [ ]
(c) special procedure radiodiagnostic room(s) [ ]
(d) fluoroscopy room(s) [ ]
(e) unused film store [ ]
(f)

D Mechanical extract ventilation will be required in:
(a) W.C.s [ ]
(b) photographic darkrooms [ ]
(c) processing areas [ ]
(d) rooms with blackout facilities [ ]
(e) changing cubicles [ ]
(f) rooms used for gastro-intestinal examinations [ ]
(g) lavage rooms [ ]
(h) dirty utility [ ]
(i)

E Drinking water must be available:
(a) at all cold water taps [ ]
(b) in the recovery room(s) [ ]
(c) in the main waiting area [ ]
(d) in the clean utility [ ]
(e) in the staff room [ ]
(f)

5.14 COMMUNICATIONS & OTHER ENGINEERING SERVICES (contd.)

Earlier decision | Ref | 5.14 COMMUNICATIONS & OTHER ENGINEERING SERVICES (contd.)

A Equipment maintenance will be carried out:
(a) in the department workshop [ ]
(b) in the hospital's central workshop [ ]
(c) on site [ ]
(d) by hospital maintenance staff [ ]
(e) by manufacturers' engineers [ ]
(f)

B Blackout facilities will be required in the:
(a) radiodiagnostic room [ ]
(b) consultant radiologist's office [ ]
(c) radiologist's office [ ]
(d) central reporting room [ ]
(e) darkroom [ ]
(f) areas containing automatic film loaders/dispensers [ ]
(g)

6. GENERAL DESIGN REQUIREMENTS

ECONOMY

ECONOMY IS IMPORTANT PARTICULARLY IN SPACE PROVISION, MAINTENANCE, STAFF UTILISATION AND ENERGY CONSUMPTION. THE TOTAL CAPITAL EXPENDITURE MUST BE BORNE IN MIND, BUT IT IS EQUALLY IMPORTANT TO ENSURE THAT RUNNING COSTS ARE KEPT TO A MINIMUM AND THE COST CONSEQUENCES OF PROJECT DECISIONS ARE FULLY CONSIDERED. A BOOKLET ENTITLED 'Note on the relationship between planning health buildings and the cost of running them' WAS ISSUED IN SEPTEMBER 1980 WITH HN(80)29, AND SHOULD BE OF INTEREST TO DESIGN TEAMS. IT CONTAINS A LIST OF 17 WORKS OF REFERENCE RELEVANT TO THE SUBJECT, AND SYNOPSES OF SOME OF THEM. REFERENCE SHOULD BE MADE TO HN(81)30, DATED OCTOBER 1981, WHICH SETS OUT ARRANGEMENTS FOR THE APPROVAL AND CONTROL OF BUILDING DEVELOPMENTS. (HBN, para. 3.8)

PLANNING SHOULD ENSURE THAT SPACES ARE USED AS INTENSIVELY AS POSSIBLE AND ARE NOT DUPLICATED. CORRECT WORKING RELATIONSHIPS WILL HELP TO FACILITATE ECONOMY. FOR EXAMPLE, AN OPEN-PLANNED AREA COMPRISING CURRENT FILM STORAGE/SORTING AND COLLATING/ DISPATCH AND RETURN , MAY WELL ASSIST IN CREATING AN EASY WORK-FLOW AS WELL AS ECONOMY IN SPACE. (HBN,para. 3.9)

Earlier decision	Ref	6. GENERAL DESIGN REQUIREMENTS
		Privacy and Segregation
10 11	A	The accommodation should be designed to provide as much privacy for individual patients as is compatible with the maximum observability by staff in sub-waiting and similar areas.
7B 9C 5D	B	Although completely separate facilities for accident/emergency patients cannot be provided, the need to be able to shield the seriously injured from other patients must be borne in mind. Similarly the need to be able to use the section of the department designated for A&E use on a 24-hour basis without activating the whole department must be considered.

DESIGN BRIEFING SYSTEM

Part 2

This part of the document should be used when all the decisions in Part 1 have been completed, to select and record suitable activity spaces for the project. Whilst an activity space can be equated with a room, it may also be an unenclosed space such as a bay or corridor.

It is recommended that a sub-group of the planning team should select the activity spaces and related data sheets outside the main meeting so that sufficient time is available to thoroughly check the implication of planning decisions taken in Part 1.

COMPLETING PART 2

The activity spaces likely to be required have been divided into suitable groups of accommodation (e.g. SANITARY FACILITIES). References are provided in the "Earlier decision" column to decisions in Part 1 which may have an effect on the activity space chosen. Activity spaces are selected using the existing bank of D.H.S.S. activity data sheets ("A" sheets), which may require modification to suit particular projects, or new "A" sheets may be generated.

The reference letter and number of "A" sheets, from which a choice may be made, has been included (e.g. Dirty Utility - Y0301). The number of activity spaces required should be entered in the "No." column. The "locational relationship" column should be used to state any important locational relationships within the department, either by ticking those already entered or adding new statements.

When all activity spaces have been chosen for each group, the whole of Part 2 should be reviewed, in its entirety, to enable the planning team to rationalise any over-provision or reconsider areas that may be shared, e.g. sharing of facilities between sections or sub-departments.

The schedule of activity spaces and data sheets may be typed directly from the completed Part 2, including any guidance the team may decide to include to assist designers.

DESIGN BRIEFING SYSTEM

RADIODIAGNOSTIC DEPARTMENT

SCHEDULE OF ACTIVITY SPACES

The accommodation to be provided in the radiodiagnostic department is scheduled in the following groups of accommodation:

FACILITIES REQUIRED AT THE ENTRANCE	36
CHANGING/PREPARATION AREAS	38
NURSING FACILITIES	39
RADIODIAGNOSTIC/ULTRASOUND FACILITIES	40
FILM PROCESSING & REPORTING	41
ADMINISTRATION & STAFF FACILITIES	42
STORAGE AREAS	43

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		ENTRANCE TO DEPARTMENT			
7F 10A-C		DEPARTMENTAL MAIN WAITING AREA:			Near the main entrance to the department
	A	- 40 persons		J1102	
	B	- 30 persons		J1104	
	C	- 20 persons		J1105	
10D	D	PATIENTS' BED/TROLLEY WAITING, R.D.		G0202	
10C	E	PATIENTS' SUB-WAITING: - 9 PERSONS, R.D.		J1212	Outside radiodiagnostic rooms
	F	PATIENTS' SUB-WAITING, A & E PATIENTS - 12 PERSONS, R.D.		J1213	
	G	RECEPTION, APPOINTMENTS, INDICES, R.D.		J0605	
8	H	CURRENT FILM STORAGE - 4 R.D. ROOMS		W0307	Close to sorting and collating area, with access to master index
	I	- 8 R.D. ROOMS		W0308	
	J	- 12 R.D. ROOMS		W0309	
11E	K	WASHROOM/ASSISTED W.C.-PATIENT, WHEELCHAIR		V1204	
	L	W.C. - PATIENT AMBULANT		V1106	

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		ENTRANCE TO DEPARTMENT			
22A,B	A	PORTERS' OFFICE/BASE, R.D.		M1706	Near entrance to department, capable of being seen from reception
25A 26D	B	MOBILE X-RAY EQUIPMENT PARKING, R.D.		G0101	Convenient to entrance to department

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		CHANGING & PREPARATION			
11A-D	A	PATIENTS' CHANGING CUBICLES - AMBULANT		V0703	Associated with the sub-waiting areas, treatment or diagnostic room
	B	- ASSISTED		V0706	
11A,E-G	C	LAVAGE ROOM - WHEELCHAIR/TROLLEY/BED		X0505	Close to fluoroscopy room served
	D	- AMBULANT PATIENT		X0506	
11E	E	WASHROOM/ASSISTED W.C. - BARIUM ENEMA		V1219	Adjacent to, but not with direct access from, the fluoroscopy room

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		NURSING FACILITIES			
13A	A	STAFF BASE		T0109	Planned as a cluster of activity spaces in the vicinity of the specialised radiodiagnostic rooms
10E	B	PATIENTS' HOLDING/RECOVERY		T0203	
13C	C	CLEAN UTILITY - 4/8 R.D. ROOMS		T0506	
	D	- 12 R.D. ROOMS		T0509	
13D 28	E	DIRTY UTILITY		Y0408	
13C	F	BARIUM PREPARATION AREA		X0507	

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		RADIODIAGNOSTIC PROCEDURES			
		RADIODIAGNOSTIC ROOM:			
3E 4A-D	A	- GENERAL		E0501	To minimise patient and staff traffic, the diagnostic rooms with a high patient throughput should be situated near to reception and those for more protracted procedures furthest away.
	B	- FLUOROSCOPY		E0502	
	C	- UROGRAPHY		E0503	
	D	- SPECIAL PROCEDURES		E0504	
12C	E	ANAESTHETIC ROOM/BAY		E0506	Adjacent to the special procedures room.
		ULTRASOUND FACILITIES			
3E 4B-D	F	GENERAL ULTRASOUND ROOM		E0505	

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		FILM PROCESSING AND REPORTING			
14 15 16	A	DAYLIGHT PROCESSING: VIEWING/CHECKING/IMMEDIATE REPORTING		E0508	Convenient to radiodiagnostic rooms
	B	DAYLIGHT PROCESSING: with DARKROOM/ VIEWING/CHECKING/IMMEDIATE REPORTING		E0507	
	C	DARKROOM, PANCHROMATIC FILMS (Ultrasound)		R0106	
18	D	FILM DISPATCH AND RETURN		E0511	
17A	E	SORTING AND COLLATING - 4 R.D. ROOMS		E0512	
	F	- 8 R.D. ROOMS		E0513	
	G	- 12 R.D. ROOMS		E0514	
		CENTRAL REPORTING:			
17B-F 18D	H	- 2 STATION/CLINICAL CONFERENCE		E0509	Near sorting and collating area
	I	- 3 STATION/CLINICAL CONFERENCE		E0510	
3D 19D	J	SEMINAR ROOM - 20 PERSONS, R.D.		H0102	

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		ADMINISTRATION AND STAFF FACILITIES			
	A	RADIOLOGISTS' OFFICE		M0303	
20	B	RADIOLOGISTS' OFFICE/CLINICAL CONFERENCE		M0309	
21B	C	RADIOLOGISTS' SECRETARY		M1306	Adjacent to radiologists' office
21B	D	OFFICE, GENERAL CLERICAL - 2 STAFF		M1014	
	E	- 4 STAFF		M1015	
20A 21A	F	SUPT RADIOGRAPHER'S OFFICE		M0508	Close to centre of activities in department
23A,C-F 24B	G	STAFF ROOM - 10 persons (overnight rest)		D0204	Near to radiodiagnostic rooms
	H	- 15 persons (overnight rest)		D0203	
	I	- 25 persons (overnight rest)		D0205	
23C	J	STAFF WASHROOM/W.C.		V1005	
	K	SHOWER		V1606	
23A,B	L	STAFF CHANGING/LOCKER ROOM - SPEC.PROCEDURE		V0509	
	M	- 3/5/3 MALE		V0510	
	N	- 10 FEMALE		V0511	
	O	- 20 FEMALE		V0512	
	P	- 30 FEMALE		V0513	

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		STORAGE AREAS			
27B,G	A	GENERAL STORE/EQUIPMENT - 4 R.D. ROOMS		W0305	
	B	- 8 R.D. ROOMS		W0310	
	C	- 12 R.D. ROOMS		W0312	
25B,C 27D	D	LINEN STORE		W0301	
25B 26A,B 27E	E	UNUSED FILM STORE		W0303	
25B 27F,G	F	CHEMICAL STORE		W0306	
25A,C 26A 29A	G	CLEANERS' ROOM		Y1501	
30 31	H	SWITCHROOM		K0101	Located centrally
32A	I	WORKSHOP		K0303	

Planning unit/dept	Page	Design Briefing System	Decisions
XRY	7	RADIODIAGNOSTIC DEPARTMENT	

Earlier decision	Ref	5.1 ENTRANCE, RECEPTION & DOCUMENTATION
	A	One main entrance will be required for: (a) all patients [✓] (b)
2A	B	Separate entrances will be required for: (a) in-patients/out-patients [ ] (b) accident and emergency patients [ ] (c)
	C	Patients may be: (a) examined on arrival, without appointment [✓] (b) given an appointment [✓] (c)
2A	D	Patients may come to the department: (a) on foot, accompanied [✓] (b) on foot, unaccompanied [✓] (c) in wheelchairs [✓] (d) on stretcher trolleys [✓] (e) in beds [✓] (f)
	E	Patients may be divided by type of examination, including: (a) simple examination requiring no undressing [✓] (b) simple examination requiring undressing [✓] (c) examination by appointment following dietry preparation [ ] (d) complex examination, by appointment, requiring special equipment, preparation and general anaesthetic [✓] (e)
	F	Patients will be directed to the appropriate waiting or sub-waiting area by: (a) a receptionist [✓] (b)
	G	Appointments will be made: (a) in blocks [ ] (b) individually [✓] (c) in a combination of block and individual bookings [ ] (d) only for those examinations requiring preparation [ ] (e)
	H	All patients will be recorded: (a) at the main reception desk on arrival [✓] (b) at separate reception points associated with sub-waiting areas [ ] (c) in the radiodiagnostic rooms [ ] (d) at the completion of the examination at reception [ ] (e)

Planning unit/dept	Page	Design Briefing System	Decisions
XRY	8	RADIODIAGNOSTIC DEPARTMENT	

Earlier decision	Ref	5.1 ENTRANCE, RECEPTION & DOCUMENTATION (contd.)
	A	Patient interviews may take place: (a) in an audibly private section of the reception area [✓] (b) in a separate office [ ] (c)
	B	Patients will be registered: (a) using their hospital or accident and emergency number [✓] (b) using an X-ray registration number [ ] (c)
	C	Patients will be registered: (a) using manual procedures [ ] (b) using manual procedures with mechanical aids [ ] (c) using a computer terminal [✓] (d) via the patient services department [✓] (e) direct with central registration [ ] (f)
	D	Patients' X-ray films/reports will be kept in the department for: (a) 2 years (b)
	E	The master index sited in reception/records will consist of: (a) cards in filing cabinets [ ] (b) computerised system [✓] (c)
	F	After such time(s) all records and films will be: (a) transferred to the central records library [✓] (b) transferred to a separate store for ___ years [ ] (c) destroyed [ ] (d)

EXAMPLES OF WAYS IN WHICH A SECTION OF A BRIEF COULD BE TYPED FROM THE OPTIONS PAGE ABOVE

Options selected - typed directly from DBS pages 7 + 8

5.1 ENTRANCE, RECEPTION & DOCUMENTATION

7A. One main entrance will be required for:
(a) all patients.
7C. Patients may be:
(a) examined on arrival, without appointment;
(b) given an appointment.
7D. Patients may come to the department:
(a) on foot, accompanied;
(b) on foot, unaccompanied;
(c) in wheelchairs;
(d) on stretcher trolleys;
(e) in beds.
7E. Patients may be divided by type of examination, including:
(a) simple examination requiring no undressing;
(b) simple examination requiring undressing;
(c) examination by appointment following dietry preparation;
(d) complex examination, by appointment, requiring special equipment, preparation and general anaesthetic.
7F. Patients will be directed to the appropriate waiting or sub-waiting area by: (a) a receptionist.
7G. Appointments will be made: (b) individually.
7H. All patients will be recorded:
(a) at the main reception desk on arrival.
8A. Patient interviews may take place:
(a) in an audibly private section of the reception area.
8B. Patients will be registered:
(a) using their hospital or accident and emergency number.
8C. Patients will be registered:
(b) using a computer terminal
(d) via the patient services department.
8D. Patients X-ray films/reports will be kept in the department for: (a) 2 years.
8E. The master index sited in reception/records will consist of: (b) a computerised system.
8F. After such time(s) all records and films will be:
(a) transferred to the central records library.

Options selected - in narrative form:

5.1 ENTRANCE, RECEPTION & DOCUMENTATION

One main entrance will be required for all patients. 7A
Patients may be examined on arrival, without
an appointment or given an appointment. They may 7C
come to the department on foot (accompanied or
unaccompanied), in wheelchairs, on stretcher 7D
trolleys or in beds.

Patients may be divided by type of examination, 7E
including simple examination requiring either no
undressing or undressing, examination (by
appointment) following dietry preparation, or
complex examination (by appointment) requiring
special equipment, preparation and general
anaesthetic. Patients will be directed to the 7F
appropriate waiting or sub-waiting area by a
receptionist.

Appointments will be made individually and all 7G
patients will be recorded at the main reception
desk on arrival. Patient interviews may take 8A
place in an audibly private section of the
reception area. Patients will be registered, 8B
using their hospital or accident and emergency
number, via a computer terminal in the patient 8C
services department. Patients' X-ray films/
reports will be kept in the department for two 8D
years; the master index sited in reception will
consist of a computerised system. After this 8E
time all records and films will be transferred 8F
to the central records library.

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